



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

HD

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,583	06/29/2004	Jan Webjorn	P/4447-3 PCT	5248
2352	7590	08/13/2007	EXAMINER	
OSTROLENK FABER GERB & SOFFEN			AMIRI, NAHID	
1180 AVENUE OF THE AMERICAS			ART UNIT	PAPER NUMBER
NEW YORK, NY 100368403			3679	
MAIL DATE		DELIVERY MODE		
08/13/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/500,583	WEBJORN, JAN
Examiner	Art Unit	
Nahid Amiri	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 October 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-8 and 10-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-8 and 10-14 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date .

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application
6) Other: ____ .

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 1-8 and 10-14 is withdrawn in view of the newly discovered reference(s) to US Patent No. 5,040,714 McManigal. Rejections based on the newly cited reference(s) follow.

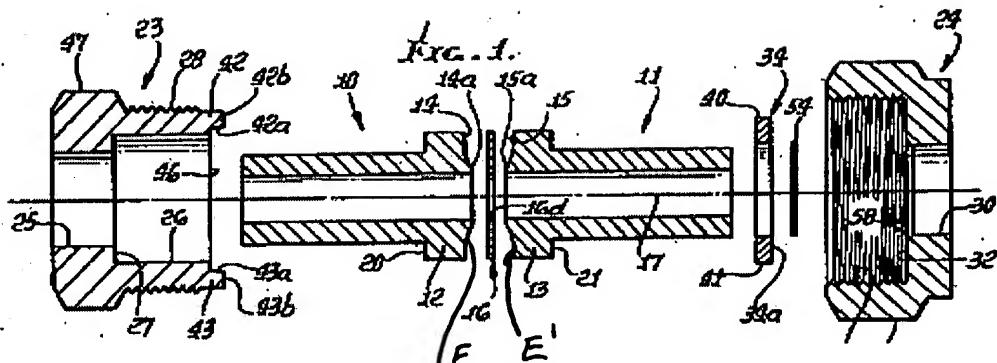
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,040,714 McManigal.

With respect to claim 1, McManigal discloses a flanged member (Fig. 1) to be included as a first flanged member (12) in a flanged joint; wherein the flanged member (12) comprising a first flanged end with a first end surface (E) configured to be assembled together with a corresponding end surface of a flanged end (E') of a second flanged member (13) in the flanged joint, at least a portion of the first end surface (E) in unstressed condition being concave in a radial direction such that the at least a portion of the first end surface (E) is curved and defined by a concave curve function; and wherein in an unstressed condition a proximal point on the at least the portion of the first end surface and a distal point of the at least the portion of the first end surface meet a plane inclined in the radial direction of the flanged member (12).



With respect to claim 2, McManigal discloses (Fig. 1) that the first end surface is concave over the entire extension thereof in the radial direction.

With respect to claim 3, McManigal discloses (Fig. 1) that the first end surface (E) is concave in the radial direction over at least an area that will be subjected to deforming forces when the flanged member (12) is assembled together with another flanged member (13).

With respect to claim 4, McManigal discloses (Fig. 1) that the first end surface (E) is concave over essentially a contact surface against the corresponding end surface (E') of the second flanged member (13).

With respect to claims 5 and 14, McManigal discloses (Fig. 1) that the first end surface (E) comprises varyingly concave surface in the radial direction; and wherein the concave surface (E) has more than one radii of curvature.

With respect to claim 10, McManigal discloses (Fig. 1) that at least a part of a transition area, between the surface of the flange directed away from the end surface and a part of the flanged member that is substantially parallel to a longitudinal axis of the member, is shaped as a substantially elliptical area.

With respect to claim 11, McManigal discloses a Joint (Fig. 1) comprising two flanged members (12, 13); the two flanged members (12, 13) each comprising at least one flanged end having an end surface (E) connecting together the two flanged members (12, 13) in an assembled state such that the end surfaces face each other, wherein at least one portion of the end surface in an unstressed condition is concave in a radial direction such that the at least the portion of the

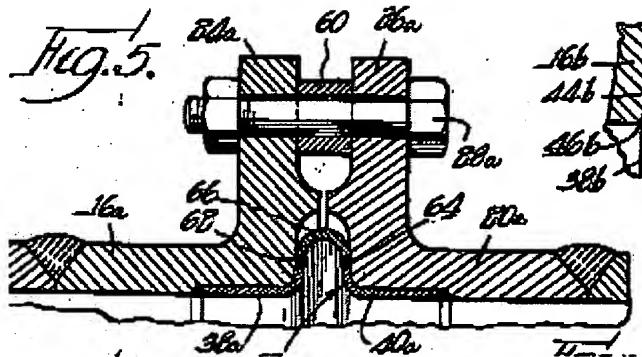
end surface is defined by a concave curve function, a proximal point on the at least the portion of the first end surface (E) and a distal point of the at least the portion of the first end surface meeting a plane inclined in the radial direction of the flange member (12).

With respect to claim 12, McManigal discloses (Fig. 1) both of the flanged members (12, 13) have a concave end surface.

With respect to claim 13, McManigal discloses (Fig. 1) the end surfaces (30, 16) facing each other before assembly are inclined in the radial direction outwards to form an angle in radial cross-section, the angle being such that a distance between the two end surfaces (E, E') increase in radial direction outwards, and at least one of the inclined end surface being slightly concave; and wherein the concave surface has more than one radii of curvature.

Claims 1-7 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 2,739,828 Schindler et al.

With respect to claim 1, Schindler et al. disclose a flanged member (Fig. 3) to be included as a first flanged member (24a) in a flanged joint; wherein the flanged member (24a) comprising a first flanged end with a first end surface (F) configured to be assembled together with a corresponding end surface of a flanged end (F') of a second flanged member (26a) in the flanged joint, at least a portion of the first end surface (F) in unstressed condition being concave in a radial direction such that the at least a portion of the first end surface (F) is curved and defined by a concave curve function; and wherein in an unstressed condition a proximal point on the at least the portion of the first end surface and a distal point of the at least the portion of the first end surface meet a plane inclined in the radial direction of the flanged member (24a).



With respect to claim 2, Schindler et al. disclose (Fig. 5) that the first end surface (F) is concave over the entire extension thereof in the radial direction.

With respect to claim 3, Schindler et al. disclose (Fig. 5) that the first end surface (F) is concave in the radial direction over at least an area that will be subjected to deforming forces when the flanged member (24a) is assembled together with another flanged member (26a).

With respect to claim 4, Schindler et al. disclose (Fig. 5) that the first end surface (E) is concave over essentially a contact surface against the corresponding end surface (E') of the second flanged member (13).

With respect to claims 5 and 14, Schindler et al. disclose (Fig. 5) that the first end surface (E) comprises varyingly concave surface in the radial direction; and wherein the concave surface (E) has more than one radii of curvature.

With respect to claim 6, Schindler et al. disclose (Fig. 5) that the flange member further comprising an internal through axial opening (A), the first end surfaces (F) having an innermost abutment point against the corresponding end surface (F') of the second flanged member (26a), which abutment point is situated farthest in the radial direction at the opening (A), the concavity of the first end surface (F) extending all the way in to the abutment point.

With respect to claim 7, Schindler et al. disclose (Fig. 5) that the first end surface (F) has an innermost abutment point against the corresponding end surface (F') of the second flanged member (24a), an internal through axial opening (A') of the second flanged member (26a), the

innermost abutment point being situated nearest in the radial direction to the opening (A), and the concavity of the first end surface (F) extending all the way in to the abutment point.

With respect to claim 11, Schindler et al. disclose (Fig. 5) comprising two flanged members (24a, 26a); the two flanged members (24a, 26a) each comprising at least one flanged end having an end surface (F) connecting together the two flanged members (24a, 26a) in an assembled state such that the end surfaces face each other, wherein at least one portion of the end surface in an unstressed condition is concave in a radial direction such that the at least the portion of the end surface is defined by a concave curve function, a proximal point on the at least the portion of the first end surface (F) and a distal point of the at least the portion of the first end surface meeting a plane inclined in the radial direction of the flange member (24a).

With respect to claim 12, Schindler et al. disclose (Fig. 5) both of the flanged members (24a, 26a) have a concave end surface.

With respect to claim 13, Schindler et al. disclose (Fig. 5) the end surfaces (F, F') facing each other before assembly are inclined in the radial direction outwards to form an angle in radial cross-section, the angle being such that a distance between the two end surfaces (F, F') increase in radial direction outwards, and at least one of the inclined end surface being slightly concave; and wherein the concave surface has more than one radii of curvature.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over McManigal.

With respect to claim 8, McManigal discloses the claimed invention except for the conceived straight X that connects an innermost point of the first end surface in the radial direction, with an outermost point b thereof, in the radial direction, has a length Lx and the concavity of the end surface has a maximum depth Dk in relation to a conceived plane surface produced by said line X, which depth Dk is of the order of 0.01%-2% of Lx. It would have been an obvious matter of design choice to construct the concavity of end surface with Applicant's specific dimension since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art of record US Patent No. 5,050,913 Lenz; is cited to show a joint assembly between two flanged members.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3679

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ne
Nahid Amiri
Examiner
Art Unit 3679
July 27, 2007

Daniel P Stodola

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600